October 25, 1996

William F. Caton
Secretary
Federal Communications Commission
Room 222
1919 M Street, NW
Washington, DC 20554

RE: CC Docket No. 94-102

Dear Mr. Caton:

Enclosed for filing please find an original and nine (9) copies of Reply Comments of the Ad Hoc Alliance For Public Access to 911 Concerning the Further Notice of Proposed Rulemaking, CC Docket No. 94-102.

Sincerely,

Samuel A. Simon, Esq.
Counsel for the Alliance

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
	)	CC Docket No. 94-102
Revision of the Commission's Rules To	)	
Ensure Compatibility with Enhanced 911	)	
Emergency Calling Systems	)	

REPLY COMMENTS OF THE
AD HOC ALLIANCE FOR PUBLIC ACCESS TO 911
CONCERNING THE FURTHER NOTICE OF
PROPOSED RULEMAKING

Summary

After careful review of the comments filed before the Commission the Alliance finds without merit the pleadings of several commenters that the Commission should back off of its commitment to open up access to 911 services by all uses of wireless handsets. The Alliance also finds that the Commission should continue to implement rules requiring cellular handsets to access 911 services through the strongest compatible signal. This policy is clearly in the public's interest and has not been refuted by any of the claims by the wireless industry. Finally, the Alliance continues to ask the Commission to impose the requirement that covered carriers process all 911 calls whether or not the call transmits a code identification.

It is beyond doubt that cellular telephones have become essential in reporting highway accidents, fires and other emergency situations to the nation's 911 system.[1] It is obvious that prompt emergency response saves lives, reduces the cost of injury and saves the public money. It is undisputed that the public interest requires changes to CMRS systems in order to provide a better response to 911 calls from wireless users. In their comments, the wireless industry argues for a hands off approach on the grounds that marketplace forces will result in solutions which will be better than those now under consideration by the Commission. However, economically driven decisions are not always in the public interest. Indeed, it was a marketplace decision that led some cellular carriers to turn the use of the nation's 911 system into a profit center and to block all emergency calls from non paying callers. What is being principally sold by these carriers is emergency service — which is already being paid for by the public. This is not to say that carriers should not be compensated for the use of their facilities -- they should. Who then should pay the cost of handling these emergency cellular calls? Clearly not the calling party, wireless subscribers as a group or the carriers. The public should pay and the Commission has so provided. However, some of the wireless commentators still complain that they will lose revenues if they are not able to sell the use of the nation's 911 system — money which these carriers were not entitled to in the first place.[2] This

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[1] See attachments to CTIA comments, exhibit B "Cellular 9-1-1 Backgrounder" Cellular phones have consistently proven their importance to savings lives and property in emergency situations."

[2] Ameritech comments. "Many cellular users subscribe to the lowest rate plan and keep the phone in their car for emergency use only. If consumers were to learn that they do not need to subscribe to wireless service in order to obtain access to 911, consumers may purchase a phone without subscribing to wireless service .... Thus, the costs of providing emergency service would not be borne by the cost-causers." Page 6. Since as high as 97 percent of wireless calls are placed by Good Samaritans it is clear that the "cost-causers" are the injured parties. The public — not the Good Samaritan who keeps a phone in

same motivation underpins the arguments that the carriers should not be required to pass non-code identified 911 calls to the PSAP. The principle reason given by these commentators is that call back is needed by the PSAP. However, as the Alliance has shown, call back is achievable with respect to non-code identified calls by using a substitute number technique already in use in the wireless industry.[3] This points up the fact that there are solutions to these problems which have been achieved, or acknowledged, by CMRS carriers with market driven incentives.[4] The Alliance agrees with the Texas Advisory Commission on State Emergency Communications in urging the Commission not to adopt the hands off approach advocated by the wireless industry but to "remain actively involved."[5]

1. Strongest Compatible Signal Requirements

Almost all of the wireless commentators now concede that there are blank spots in the coverage of their service areas. The undisputed evidence put forth by the Alliance is

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the car "for emergency use only"— should bear this cost. Ameritech also argues that they will be exposed to liability for handling calls from non-subscribers because, in subscriber contracts, they can insert a provision disclaiming liability. Since 97 per cent of the injured parties are not subject to these contracts this seems like a pointless argument.

[3] Alliance Comments, September 25, 1996, Attachment E.

[4] AT&T Wireless comments that "the Commission has acknowledged that requiring all 911 calls to be forwarded .... presents difficult problems for service providers." Page 7. Not true. The Commission recited the *contentions* of some wireless carriers. AT&T Wireless then cites Schurtz Communications, Inc. v. FCC, 982 F.2d 1043, 1049, for the proposition that the failure to accept the wireless industries concerns was not a reasonable response. That case, and the facts in this case, give no support to AT&T's argument. In Schurtz the court was critical of the effort to compromise between "clamoring suppliants who have somehow to be conciliated" and suggested that the Commission should have considered the "possibility of resolving a conflict in favor of the party with the stronger case." At page 1050. What we have here is a wireless industry of "clamoring suppliants" who demand that they are entitled "somehow to be conciliated."

[5] Further Comments of the Texas Advisory Commission, page 2.

that these holes are frequent, widely dispersed and can present a serious problem in emergency situations. The Alliance's studies submitted throughout this proceeding also proved that the problem caused by these holes can be substantially ameliorated if the strongest compatible signal is selected when a 911 call is placed. "[M]any wireless service providers claim[ed] that Alliance's proposal is technically infeasible and without merit."[6] The Commission stated that if "***a commentor believes that Alliance's proposal is technically infeasible, it should provide its reasons in detail, with supporting engineering analyses.***"[7] Some commentators repeat their earlier unfounded claims but **none provided any detailed reasons and none provided any supporting engineering analyses.**[8] None of the equipment manufacturers who submitted comments questioned the technical feasibility of permitting the CMRS handset to select automatically the strongest compatible signal when 911 is dialed.[9] The fall back argument now advanced by the wireless industry is that the marketplace forces will require carriers to fill in their blank spots.[10] The cellular industry has had ten years to fill in the blank spots and they have not done so, thus it is reasonable to assume that they cannot or will not do so now.

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6 FNPRM, paragraph 147, page 72.

7 Id, paragraph 144, page 71. Emphasis added.

8 AT&T Wireless Services, Inc. gives us a remote example where multi-path might not give us a "true signal reading" Page 5. We can always think up examples of this sort but the fact remains that 99% of the time there will be a substantial benefit to the public by the selection of the strongest compatible signal.

9 Comments were submitted by Harris Corporation, Nokia, Lucent and E.F. Johnson.

10 PCIA comments, page 12. The underlying logic to this argument is outrageous. It presumes that as people fail to reach 911 in emergencies they will start switching carriers.

Clearly the public interest will not be served by such indefinite wait, especially when the Alliance proposal presents a quick and inexpensive solution to this critical problem.

Other commentators assert, without foundation, that the strongest signal changes like a yo-yo when the cellular user moves. **The undisputed empirical data supplied by the Alliance controverts this unsupported assertion.** Furthermore, as shown by Appendix E to the September 25, 1996 comments by the Alliance, in serious accident situations the calling party has most likely stopped to render assistance. Some wireless commentators also state that selection of the strongest control channel does not necessarily mean the strongest voice channel will be selected. Those who make this false claim failed to submit any engineering analysis to back up their claims. All we have is their *ipse dixit*. Out of an abundance of caution, the Alliance has had an engineering analysis prepared to refute this claim. A copy of that analysis is attached hereto as Attachment A.

The argument that an adequate channel should suffice even if there is a better channel available is absurd.[11] The Texas Advisory Commission on State Emergency Communications points out, the "Nation's citizens will benefit greatly from . . . .

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[11] Lucent Technologies "supports the concept of meeting the public need for 911 calls where the subscribed system does not have an adequate signal". Pages 6-7. Lucent recommends that the 911 call be carried by the home or preferred system "if the signal is adequate to carry a call." Lucent reasons that this "would provide a more equitable distribution of 911 calls." What is an "adequate signal" when lives and property are at stake? Since the carriers are to be compensated for the use of their systems why is "a more equitable distribution" an issue? The Alliance tests do not show that there would be an imbalance in the handling of 911 calls. Lucent also says that there would be substantial additional handset costs but gives us no basis for their statement. The Trott study indicated that only a minor software change was involved which would be a small expense. Again, the Commission stated that commentors who oppose the Alliance proposal should submit "reasons in detail, with supporting engineering analyzes." This was not done by Lucent and, it is submitted, their unsupported statements should be disregarded by the Commission.

improvements in the ***quality and reliability*** of wireless 9-1-1 service."[12] APCO, NENA and NASNA agree that the Commission "should consider requiring that 9-1-1 callers be able to reach the strongest available signal".[13] ***Life and property are often at stake in an emergency.*** The public interest plainly mandates the use of the clearest and strongest channel of communication available to report emergency situations to the PSAP.

2. System Compatibility

There are no perfect solutions for every problem. The Commission has decided to allow the marketplace to determine which of the various wireless technologies survive and prosper. Thus, there will be incompatibility between some wireless systems. Nevertheless, the Commission asked that commentators suggest "ways to enable such mobile users to complete a 911 call" over any system including "partial solutions."[14] Some of the commentators note that dual mode wireless phones are in production. Others state that common air interfaces are under development. The Alliance covered both of these points and offered a proposal for reallocation of some 900 MHZ spectrum for 911 calls.

3. Non-Code Identification Calls

The Commission also requested comment concerning delivery of non-code identified 911 calls to PSAPs that do not request them after one year. The principal problem with non-code identified calls is the inability of the PSAP to call back the caller

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12 Further comments of the Texas Advisory Commission, page 1. (Emphasis added).

13 APCO, NENA and NASNA comments, page 6.

14 FNPRM, paragraph 147, page 72, and paragraph 148, page 73.

who placed the 911 call. Call back is desired by the PSAP **but not at the expense of *not getting the call* in the first place!**[15] Some public service agencies commented that the Commission should impose the requirement "upon covered carriers the obligation to process all 911 calls, whether or not the call transmits a Code Identification."[16] The Alliance agrees with this position. As shown by the Alliance, however, call back is not a problem because the wireless industry already has in place a substitute number protocol which would enable call back to any caller.

The examples of fraud given by CTIA and others raise questions as to why the cell carrier did not use triangulation to find the hoax caller and block such calls from repeatedly going through to the PSAP.[17] The answer is there was no economic incentive for the carrier to do so and that is precisely why regulatory requirements are sometimes necessary. The same situation pertains to the deployment of location information technology. Despite the protestations of the wireless industry to the contrary, it is clear that the Commission needs to set implementation targets and the time deadlines before the industry will seriously address the problem.

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[15] OETS "support the position taken by NENA and NASNA that non-initialized wireless phones" not be permitted to access 911. Page 2. This is not correct. NENA and NASNA have taken the position that "calls from non-initialized phones raise problems for many PSAPs due to the lack of a call-back number" and each PSAP should decide for itself whether to accept such calls. (APCO, NENA and NASNA comments, page 7). The Alliance has now shown how the call back problem to non-initialized phones can be easily solved using technology presently in place and used on a daily basis by cellular carriers.

[16] Comments of the International Association of Fire Chiefs and the International Municipal Signal Association. Page 5.

[17] Comments of New Jersey OETS, page 2. One wonders if the OETS knew that the wireless carriers involved had the ability to locate the calling party and block the prank calls they describe.

4. Consumer Education

Finally, there was some consensus among commentators concerning the need for consumer education but the wireless industry maintains that they are doing a good job and should be left alone. Some carriers are doing a good job and we applaud them. Some cellular carriers were not blocking 911 calls and we commended them for realizing their public service obligations. These are areas however, where the Commission needs to be actively involved and simply cannot leave it to the wireless industry which is too often simply motivated by marketplace considerations alone.

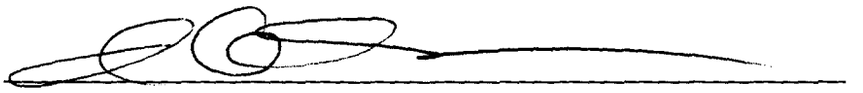
Conclusion

As shown in the above arguments the comments to the further **NPRM** by the wireless industry generally say the proposals under consideration by the FCC are not possible -- or at least not possible yet, until after further study and consultation. The theme of the wireless industry is that "the marketplace" will solve all problems. The wireless industry has found that there is growth and significant profit in controlling the gateway to the 911 system and they seek to restrict access to protect that profit in each and every way possible. This market driven response is clearly not in the public interest. The Alliance has shown that there are easily available solutions for many of the problems which the wireless industry said were "not possible" to solve. The Alliance strongly urges the Commission to adopt the requirement that CMRS handsets automatically seek out the strongest compatible signal whenever 911 is dialed. The Alliance also advocates the adoption of a rule that requires all 911 calls to be transmitted to the appropriate PSAP. The Commission should adopt ALI standards now and set a date certain for their

implementation. What was "not possible" will be achieved if the Commission sets the goals and monitors the progress of the parties. The Alliance also urges the Commission to mandate a consumer education program which should not be left to the dictates of the wireless industry.

Respectfully submitted

Ad Hoc Alliance For Public Access to 911

by: 

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Attachment A

TROTT
COMMUNICATIONS GROUP

October 18, 1996

Trott Communications Group, Inc. prepared this response to the comments filed in the matter of CC Docket 94-102 at the request of the Ad Hoc Alliance for Public Access to 911.

Several of the commenters contend that the "Alliance" proposal for selection of the strongest, compatible signal is flawed or unworkable and this proposal is attacked on several fronts. Their discussions concerning incompatibility between the several digital and analog technologies were addressed by the "Alliance" in its comments and will not be repeated herein. The second issue raised was the contention that the strongest control channel does not indicate the strongest voice channel. The radiated signal from the control channel that pilots the cell or sector is **always** designed to mimic very carefully the available radiated signal from the associated voice channels of that cell or sector. This design practice assures the handset that is tracking the control channel signal of knowing where the useful coverage area of that cell lies. Therefore, when a handset locks onto the strongest control channel signal for a given cell, the strength of the control channel signal is truly representative of the strength of the associated voice channels of that cell. Otherwise, there will be either cell or sector access in areas where there is no voice coverage or voice coverage where there is no control channel access. Neither approach makes any sense; therefore, the contention also makes no sense. The contention that the control channel and the voice channel are unrelated is simply not true.

In some isolated cases, the control channel power is reduced by 3dB compared to the voice channels to ensure good voice quality in all areas where cell or sector access is available. This differential is far outweighed by the 20dB average differential between systems in some markets.

The third issue raised by commenters is that of simply moving a few meters will invert the carrier providing the strongest signal. This is only true where the control channel signals, therefore voice channel signals are nearly equal level between the two carriers. As the "Alliance" field tests have demonstrated, the differential between systems in some markets averages 20dB and in many locations this differential was measured as high as 50dB. In these cases, movement of many hundred meters would be required to overcome this high differential. In markets where the differential is less (approximately 10dB as in Dallas), the selection becomes less important since the subscriber is at less risk of not completing or losing the call. However, many 911 calls are made by immobilized subscribers (such as from an accident location). If this location happens to be in a "dead spot or service gap" area, it is then imperative that the subscriber's equipment be capable of automatically placing the call on the other system which probably will not have the same "dead spots or service gaps" and most likely will be capable of providing superior service.

As rightly stated by PCIA in their comments on page 12, "*Wireless systems, by their nature, will never be able to provide 100 percent coverage.*" This supports the "Alliance" position that, since carriers will never be able to provide 100 percent coverage, there will always be cases where selection of the strongest compatible signal is necessary and critical.

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